

Amendments to the Specification:

Please replace Table 1 at page 8, line 26 through page 9, line 17 with the following amended Table 1. As portions of the text in Table 1 were presented as underlined text in the as-filed specification, all amendments made herein have been presented as double-underlined text.

Table 1: MSF amino acid sequence (SEQ ID NO:1)

MAWKTLPIYLLLLSVFVIQVSSQDLSSCAGRCGEGYSRDATCNCQHYMECCP
DFKRVCTAELSCKGRCFESFERGRECDCAQCKKYDKCCPDYESFCAEVHNPTSPSSK
KAPPPSGASQTIKSTTKRSPKPPNKKTKKVIESEEITEHSVSENQESSSSSSSSSSSTIW
KIKSSKNSAANRELQKKLVKDNKKNRKTKKPTPKPPVVDEAGSGLDNGDFKVTTT
STTQHNKVSTSPKITTAKPINRPSLPNSDTSKETS~~SLTVNKETT~~VETKETT~~TTTNKQ~~STD
GKEKTTS~~AKETQ~~SIEKTS~~AKDLAPT~~SKVLAKPTPKAETTTKGPALTT~~PKETPTTPKEPAS~~
TTPKEPTPTTIKSAPTTPKEPAPT~~TTT~~KSAPTTPKEPAPT~~TTT~~KEPAPTTPKEPAPT~~TTT~~KEPAPT
TTKSAPTTPKEPAPTTPKKPAPTTPKEPAPTTPKEPTTTPKEPAPTTPKEPAPTTPKEPAPT
APKKPAPTTPKEPAPTTPKEPAPT~~TTT~~KEPSPTTPKEPAPT~~TTT~~KSAPT~~TTT~~KEPAPT~~TTT~~KSAPT
TPKEPSPT~~TTT~~KEPAPTTPKEPAPTTPKKPAPTTPKEPAPTTPKEPAPT~~TTT~~KKPAPTAPKEPA
PTTPKETAPTTPKKLTPTTPEKLAPTTPKEPAPTTPPELAPTTPPEPTPTTPEEPAPTTPKAA
APNTPKEPAPTTPKEPAPTTPKEPAPTTPKETAPTTPKGTAPTTLKEPAPTTPKKPAPKEL
APT~~TTT~~KEPTSTTSDKPAPTTPKGTAPTTPKEPAPTTPKEPAPTTPKGTAPTTLKEPAPTTPK
KPAPKELAPT~~TTT~~KGPTSTTSDKPAPTTPKETAPTTPKEPAPTTPKKPAPTTPETPPPTTSEV
STPT~~TTT~~KEPTT~~TIHKSP~~DESTPELSA~~EPTPKA~~LENSPK~~EGVPTTKTPAATKPEM~~TTTAKDK
TTERDLR~~TTPETTTA~~APKMTKETATTTEKT~~TESKITATTTQVTSTTTQD~~TTPFKITT~~LKTT~~
TLAPKV~~TTTKTITT~~TEIMNKPEETA~~KPKDRATNSKATTPKPQKPTKAPKKPTSTKKPKT~~
MPRV~~RKPKTTPTPRKMTST~~MPELNPTS~~RIAEAMLQTTTRPNQTPNSKLVEVNP~~KSEDAG
GAEGETH~~PHMLLRPHVFMPEVTPDMDYLPRVPNQGIINPMLSDET~~NICNGK~~PVDGLTTLR~~
NGTLVAFRGHYFWMLSPFSPSPARRITEVWGIPSPIDTVFTRCNCEGK~~TTFFKDSQYWR~~
FTNDIKDAGYPKPIFKGFGGLTGQIVAALSTAKYKNWPESVYFFKRGGSIQYIYKQEPV
QKCPGRRPALNYPVYGEMTQVRRRRFERAIGPSQHTTIRIQYSPARLAYQDKGVLHNEV
KVSILWRGLPNVVTSAISLPNIRKPDGYDYA~~FSKDQYYNIDVPSRTARA~~ITTRSGQTLS
KVWYNCP (~~SEQ ID NO:1~~)

Please replace Table 2 at pages 9-11 with the following amended Table 2. As portions of the text in Table 2 were presented as underlined text in the as-filed specification, all amendments made herein have been presented as double-underlined text.

Table 2: MSF cDNA (SEQ ID NO:2)

1	gcggccgcga	ctattcggtg	cctgaaaaca	acgatggcat	ggaaaacact	tccatttac
61	ctgtgtgtgc	tgctgtctgt	tttcgtgatt	cagcaagttt	catctcaaga	tttatcaagc
121	tgtgcaggga	gatgtgggga	agggtattct	agagatgcca	cctgcaactg	tgattataac
181	tgtaacact	acatggagtg	ctgccctgat	ttcaagagag	tctgcactgc	ggagctttcc

Applicants: Jay, Gregory D.
U.S.S.N. 09/897,188

241	tgtaaaggcc	gctgcttga	gtccttcgag	agaggaggagg	agtgtgactg	cgacgccccaa
301	tgtaagaagt	atgacaagt	ctgtcccgat	tatgagagtt	tctgtgcaga	agtgcataat
361	cccacatcac	caccatcttc	aaagaaagca	cctccacctt	caggagcatc	tcaaacctac
421	aatcaacaa	ccaaacgttc	acccaaacca	caaacaaga	agaagactaa	gaaagttata
481	gaatcagagg	aaataacaga	agaacattct	gtttctgaaa	atcaagagtc	ctcctcctcc
541	tcctcctctt	cctcttcttc	ttaacaatt	tggaatatca	agttttccaa	aaattcagct

EXON 6

601	<u>gctaatagag</u>	<u>aattacagaa</u>	<u>gaaactcaaa</u>	<u>gtaaaagata</u>	<u>acaagaagaa</u>	<u>cagaactaaa</u>
661	<u>aagaaacct</u>	<u>ccccaaacc</u>	<u>accagttgta</u>	<u>gatgaagctg</u>	<u>gaagtggatt</u>	<u>ggacaatggt</u>
721	<u>gacttcaagg</u>	<u>tcacaactcc</u>	<u>tgacacgtct</u>	<u>accaccaaac</u>	<u>acaataaagt</u>	<u>cagcacatct</u>
781	<u>cccaagatca</u>	<u>caacagcaaa</u>	<u>accaataaat</u>	<u>cccagaccca</u>	<u>gtcttcacc</u>	<u>taattctgat</u>
841	<u>acatctaaag</u>	<u>agacgtcttt</u>	<u>gacagtgaat</u>	<u>aaagagacaa</u>	<u>cagttgaaac</u>	<u>taaagaaact</u>
901	<u>actacaacaa</u>	<u>ataaacagac</u>	<u>ttcaactgat</u>	<u>ggaaaagaga</u>	<u>agactacttc</u>	<u>cgctaaagag</u>
961	<u>acacaaagta</u>	<u>tagagaaaac</u>	<u>atctgctaaa</u>	<u>gatttagcac</u>	<u>ccacatctaa</u>	<u>agtgtctggct</u>
1021	<u>aaacctacac</u>	<u>ccaaagctga</u>	<u>aactacaacc</u>	<u>aaaggccctg</u>	<u>ctctcaccac</u>	<u>tccaagggag</u>
1081	<u>cccagccca</u>	<u>ccactccaa</u>	<u>ggagcctgca</u>	<u>tctaccacac</u>	<u>ccaaagagcc</u>	<u>cacacctacc</u>
1141	<u>accatcaagt</u>	<u>ctgcaccac</u>	<u>cacccccaa</u>	<u>gagcctgcac</u>	<u>ccaccaccac</u>	<u>caagtctgca</u>
1201	<u>cccaccactc</u>	<u>ccaaggagcc</u>	<u>tgaaccaccc</u>	<u>accaccaagg</u>	<u>agcctgcacc</u>	<u>caccactccc</u>
1261	<u>aaggagcctg</u>	<u>caccaccac</u>	<u>caccaaggag</u>	<u>cctgcacca</u>	<u>ccaccacca</u>	<u>gtctgcacc</u>
1321	<u>accactccca</u>	<u>aggagcctgc</u>	<u>accaccaccc</u>	<u>cccaagaagc</u>	<u>ctgccccaac</u>	<u>tacccccaa</u>
1381	<u>gagcctgcac</u>	<u>ccaccactcc</u>	<u>caaggagcgc</u>	<u>acaccacca</u>	<u>ctcccaagga</u>	<u>gcctgcacc</u>
1441	<u>accaccaagg</u>	<u>agcctgcacc</u>	<u>caccactccc</u>	<u>aaagagcttg</u>	<u>caccactgc</u>	<u>ccccaaagag</u>
1501	<u>cctgcccac</u>	<u>ctacccccaa</u>	<u>ggagcctgca</u>	<u>cccaccactc</u>	<u>ccaaggagcc</u>	<u>tgaccccacc</u>
1561	<u>accaccaagg</u>	<u>agccttcacc</u>	<u>caccactccc</u>	<u>aaggagcctg</u>	<u>caccaccac</u>	<u>caccaagctc</u>
1621	<u>gcaccacca</u>	<u>ctaccaagga</u>	<u>gcctgcacc</u>	<u>accactacca</u>	<u>agtctgcacc</u>	<u>caccactccc</u>
1681	<u>aaggagcctt</u>	<u>caccaccac</u>	<u>caccaaggag</u>	<u>cctgcacca</u>	<u>ccactcccaa</u>	<u>ggagcctgca</u>
1741	<u>cccaccacc</u>	<u>ccaagaagcc</u>	<u>tgccccaact</u>	<u>accccaagg</u>	<u>agcctgcacc</u>	<u>caccactccc</u>
1801	<u>aaggaaactg</u>	<u>caccaccac</u>	<u>caccaagaag</u>	<u>cctgcagcca</u>	<u>ccgctcccaa</u>	<u>agagcctgcc</u>
1861	<u>ccaactacc</u>	<u>ccaaggagac</u>	<u>tgaccccacc</u>	<u>accccaaga</u>	<u>agctcacgcc</u>	<u>caccaccccc</u>
1921	<u>gagaagctcg</u>	<u>caccaccac</u>	<u>cctgagaag</u>	<u>ccgacacca</u>	<u>ccacccctga</u>	<u>ggagctcgca</u>
1981	<u>cccaccacc</u>	<u>ctgaggagcc</u>	<u>cacaccacc</u>	<u>accctgagg</u>	<u>agcctgctcc</u>	<u>caccactccc</u>
2041	<u>aaggcagcgg</u>	<u>ctcccaacac</u>	<u>ccctaaggag</u>	<u>cctgctcaa</u>	<u>ctacccctaa</u>	<u>ggagcctgct</u>
2101	<u>ccaactacc</u>	<u>ctaaggagcc</u>	<u>tgctccaact</u>	<u>accctaagg</u>	<u>agactgctcc</u>	<u>aactaccct</u>
2161	<u>aaagggactg</u>	<u>ctccaactac</u>	<u>cctcaaggaa</u>	<u>cctgcacca</u>	<u>ctactcccaa</u>	<u>gaagcctgcc</u>
2221	<u>tccaaggagc</u>	<u>ttgcaccac</u>	<u>caccaccaag</u>	<u>gagcccat</u>	<u>ccaccactc</u>	<u>tgacaagccc</u>
2281	<u>gctccaacta</u>	<u>cccctaagg</u>	<u>gactgctcca</u>	<u>actacccta</u>	<u>adgadctgc</u>	<u>tccaactacc</u>
2341	<u>cctaaggagc</u>	<u>ctgctccaac</u>	<u>taccctaag</u>	<u>gggactgctc</u>	<u>caactacct</u>	<u>caaggaaact</u>
2401	<u>gcaccacta</u>	<u>ctcccaagaa</u>	<u>gcctgcccc</u>	<u>aaggagcttg</u>	<u>caccaccac</u>	<u>caccaagggg</u>
2461	<u>cccacatcca</u>	<u>ccacctctga</u>	<u>caagcctgct</u>	<u>ccaactacac</u>	<u>ctaaggagac</u>	<u>tgctccaact</u>
2521	<u>accccaagg</u>	<u>agcctgcacc</u>	<u>cactaccccc</u>	<u>aagaagcctg</u>	<u>ctccaactac</u>	<u>tctgagaca</u>
2581	<u>cctctccaa</u>	<u>ccacttcaga</u>	<u>ggtctctact</u>	<u>ccaactacca</u>	<u>ccaaggagcc</u>	<u>taccactatc</u>
2641	<u>cacaaaagcc</u>	<u>ctgatgaatc</u>	<u>aactcctgag</u>	<u>ctttctgcag</u>	<u>aaccacacc</u>	<u>aaaagctctt</u>
2701	<u>gaaaacagtc</u>	<u>ccaaggaacc</u>	<u>tggtgtacct</u>	<u>acaactaaga</u>	<u>ctcctgcagc</u>	<u>gactaaacct</u>
2761	<u>gaaatgacta</u>	<u>caacagctaa</u>	<u>agacaagaca</u>	<u>acagaaagag</u>	<u>acttacgtac</u>	<u>tacacctgaa</u>
2821	<u>actacaactg</u>	<u>ctgcacctaa</u>	<u>gatgacaaaa</u>	<u>gagacagcaa</u>	<u>ctacaacaga</u>	<u>aaaaactacc</u>

2881	<u>gaatccaaaa</u>	<u>taacagctac</u>	<u>aaccacacaa</u>	<u>gtaacatcta</u>	<u>ccacaactca</u>	<u>agataccaca</u>
2941	<u>ccattcaaaa</u>	<u>ttactactct</u>	<u>taaaacaact</u>	<u>actcttgcac</u>	<u>ccaaagtaac</u>	<u>tacaacaaaa</u>
3001	<u>aagacaatta</u>	<u>ctaccactga</u>	<u>gattatgaac</u>	<u>aaacctgaag</u>	<u>aaacagctaa</u>	<u>accaaaaagac</u>
3061	<u>agagctacta</u>	<u>attctaaagc</u>	<u>gacaactcct</u>	<u>aaacctcaaa</u>	<u>agccaaccaa</u>	<u>agcaccceaaa</u>
3121	<u>aaaccctact</u>	<u>ctacaaaaaa</u>	<u>gccaaaaaca</u>	<u>atgctcagag</u>	<u>tgagaaaaacc</u>	<u>aaagacgaca</u>
3181	<u>ccaactcccc</u>	<u>gcaagatgac</u>	<u>atcaacaatg</u>	<u>ccagaattga</u>	<u>aaccttacctc</u>	<u>aagaatagca</u>
3241	<u>gaagccatgc</u>	<u>tccaaaccac</u>	<u>caccagacct</u>	<u>aaccaaactc</u>	<u>caaactccaa</u>	<u>actagttgaa</u>
3301	<u>gtaaatccaa</u>	<u>agagtgaaga</u>	<u>tgcagggtgt</u>	<u>gctgaaggag</u>	<u>aaacacctca</u>	<u>tatgcttctc</u>
3361	<u>aggcccatg</u>	<u>tgttcatgcc</u>	<u>tgaagtact</u>	<u>cccgcacatgg</u>	<u>attacttacc</u>	<u>gagagtaccc</u>
3421	<u>aatcaaggca</u>	<u>ttatcatcaa</u>	<u>tcccatgctt</u>	<u>tccgatgaga</u>	<u>ccaatatatg</u>	<u>ccatggtaag</u>
3481	<u>ccagtagatg</u>	<u>gactgactac</u>	<u>tttgcgcaat</u>	<u>gggacattag</u>	<u>ttgcattccg</u>	<u>aggtcattat</u>
3541	<u>ttctggatgc</u>	<u>taagtccatt</u>	<u>cagtcacca</u>	<u>tctccagctc</u>	<u>gcagaattac</u>	<u>tgaagtttgg</u>
3601	<u>ggtattcctt</u>	<u>ccccattga</u>	<u>tactgtttt</u>	<u>actaggtgca</u>	<u>actgtgaagg</u>	<u>aaaaactttc</u>
3661	<u>ttctttaagg</u>	<u>attctcagta</u>	<u>ctggcgttt</u>	<u>accaatgata</u>	<u>taaaagatgc</u>	<u>agggtacccc</u>
3721	<u>aaaccaattt</u>	<u>tcaaaggatt</u>	<u>tggaggacta</u>	<u>actggacaaa</u>	<u>tagtggcagc</u>	<u>gctttcaaca</u>
3781	<u>gctaaatata</u>	<u>agaactggcc</u>	<u>tgaatctgtg</u>	<u>tatttttca</u>	<u>agagaggtgg</u>	<u>cagcattcag</u>
3841	<u>cagtataatt</u>	<u>ataaacagga</u>	<u>acctgtacag</u>	<u>aagtgccctg</u>	<u>gaagaaggcc</u>	<u>tgctctaaat</u>
3901	<u>tatccagtgt</u>	<u>atggagaaat</u>	<u>gacacaggtt</u>	<u>aggagacgtc</u>	<u>gctttgaacg</u>	<u>tgctatagga</u>
3961	<u>ccttctcaaa</u>	<u>cacacacat</u>	<u>cagaattcaa</u>	<u>tattcacctg</u>	<u>ccagactggc</u>	<u>ttatcaagac</u>
4021	<u>aaaggtgtcc</u>	<u>ttcataatga</u>	<u>agttaaagt</u>	<u>agtatactgt</u>	<u>ggagaggact</u>	<u>tccaatgtg</u>
4081	<u>gttacctcag</u>	<u>ctatatcact</u>	<u>gccccacatc</u>	<u>agaaaacctg</u>	<u>acggctatga</u>	<u>ttactatgcc</u>
4141	<u>tttctaaag</u>	<u>atcaatacta</u>	<u>taacattgat</u>	<u>gtgcctagta</u>	<u>gaacagcaag</u>	<u>agcaattact</u>
4201	<u>actcgttctg</u>	<u>ggcagacctt</u>	<u>atccaaagtc</u>	<u>tggtagaact</u>	<u>gtccttagac</u>	<u>tgatgagcaa</u>
4261	<u>aggaggagtc</u>	<u>aactaatgaa</u>	<u>gaaatgaata</u>	<u>ataaattttg</u>	<u>acactgaaaa</u>	<u>acattttatt</u>
4321	<u>aataaagaat</u>	<u>attgacatga</u>	<u>gtataccagt</u>	<u>ttatatataa</u>	<u>aaatgttttt</u>	<u>aaacttgaca</u>
4381	<u>atcattacac</u>	<u>taaaacagat</u>	<u>ttgataatct</u>	<u>tattcacagt</u>	<u>tgttattgtt</u>	<u>tacagacat</u>
4441	<u>ttaattaata</u>	<u>tttctctgt</u>	<u>ttattcctcc</u>	<u>tctccctccc</u>	<u>attgcatggc</u>	<u>tcacacctgt</u>
4501	<u>aaaagaaaaa</u>	<u>agaatcaaat</u>	<u>tgaatatatc</u>	<u>ttttaagaat</u>	<u>tcaaaactag</u>	<u>tgtattcact</u>
4561	<u>taccctagtt</u>	<u>cattataaaa</u>	<u>aatatctagg</u>	<u>cattgtggat</u>	<u>ataaaactgt</u>	<u>tgggtattct</u>
4621	<u>acaacttcaa</u>	<u>tggaaattat</u>	<u>tacaagcaga</u>	<u>ttaatccctc</u>	<u>ttttgtgac</u>	<u>acaagtacaa</u>
4681	<u>tctaaaagtt</u>	<u>atattggaaa</u>	<u>acatggaaat</u>	<u>attaaaattt</u>	<u>tacactttta</u>	<u>ctagctaaaa</u>
4741	<u>cataatcaca</u>	<u>aagctttatc</u>	<u>gtgttgata</u>	<u>aaaaaattaa</u>	<u>caatataatg</u>	<u>gcaataggta</u>
4801	<u>gagatacaac</u>	<u>aatgaatat</u>	<u>aacactataa</u>	<u>cacttcatat</u>	<u>tttccaaatc</u>	<u>ttaatttga</u>
4861	<u>tttaagggaag</u>	<u>aatcaataa</u>	<u>atataaaata</u>	<u>taagcacata</u>	<u>tttattatat</u>	<u>atctaaggta</u>
4921	<u>tacaaatctg</u>	<u>tctacatgaa</u>	<u>gtttacagat</u>	<u>tggtaaatat</u>	<u>catctgctca</u>	<u>acatgtaatt</u>
4981	<u>atttaataaa</u>	<u>actttggaac</u>	<u>attaaaaaaa</u>	<u>taaattggag</u>	<u>gcttaaaaaa</u>	<u>aaaaaaaaaa</u>
5041	a (SEQ ID NO:2)					

Please replace the paragraph at page 39, lines 6-7 with the following amended paragraph:

Alternative splicing was found to be responsible for generating 4 different phenotypical isoforms of MSF from both synovial fibroblasts and chondrocytes (Figs. 2A and 2B Fig. 2).